

REMARKS

Claims 1-19 are pending in this application, of which claims 1, 17, and 18 are independent. New claim 19 has been added. Favorable reconsideration of the Final Office Action mailed October 7, 2008 ("Final Action") is respectfully requested in view of the foregoing amendments and the following remarks.

35 U.S.C. § 103 Rejections

Previously-presented claims 1-15, 17, and 18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Chou et al. (US 5,797,123) in view of Foote ("An Overview of Audio Information Retrieval").

Amended claim 1 is directed to a method for locating putative instances of a spoken event of interest in an audio signal. More specifically, claim 1 requires in part "forming a specification of a spoken event of interest to be located in unknown speech according to a plurality of sequences of subword units representing the spoken event of interest, wherein the forming includes identifying one or more instances of the spoken event of interest in a first set of audio signals, and representing each identified instance of the spoken event of interest in the specification using at least one of the plurality of sequences of subword units, ... and locating putative instances of the spoken event of interest in the second audio signal using the specification of the spoken event of interest, wherein the locating includes identifying time locations of the second audio signal at which the spoken event of interest is likely to have occurred based on a comparison of the data representing the unknown speech with the specification of the spoken event of interest."

Chou is directed to a system that applies a multiple pass procedure to a spoken utterance, so as to "partially or fully understand" that the spoken utterance. The Chou system includes a key-phrase detector that is operable to process a spoken utterance and generate a plurality of detected key-phrases that may be passed along to another component of the Chou system for key-phrase verification. Although each of the detected key-phrases is defined by a sequence of one or more words, and each word is itself defined by a sequence of subwords, Chou does not provide any suggestion or

disclosure of a detected key-phrase or subword sequence being a "spoken event of interest to be located in unknown speech." In fact, no portion of Chou provides any hint or disclosure of locating further instances of a key-phrase or subword sequence detected within the spoken utterance in unknown speech. Accordingly, there is no reason for any component of the Chou system to form a specification of a spoken event of interest to be located in unknown speech according to a plurality of sequences of subword units representing the spoken event of interest, much less do so by "identifying one or more instances of the spoken event of interest in a first set of audio signals, and representing each identified instance of the spoken event of interest in the specification using at least one of the plurality of sequences of subword unit," as required in amended claim 1. Chou is concerned only with understanding what was uttered by a user.

Foote provides an overview of a number of different audio information retrieval techniques. One commonality amongst the described techniques is the generation of a representation of the unknown speech that is to be searched. For example, in section 2.2, Foote describes a "lattice-based" word spotting technique that involves generating, by a phone or word recognition system, a lattice that is a compact representation of multiple best hypothesis of the unknown speech. As stated in section 2.2, [if] the phone lattice is generated before need, it can then be searched extremely rapidly to find phone strings corresponding to *desired query words*." Foote does not specify the form of the "desired query words." Foote provides no hint or disclosure that the "desired query words" to be located in the phone lattice are provided in a spoken form. Foote certainly does not contemplate "forming a specification of a spoken event of interest to be located in unknown speech according to a plurality of sequences of subword units representing the spoken event of interest," much less using such a specification to locate putative instances of the spoken event of interest in an audio signal. Foote is further silent about "identifying time locations of the second audio signal at which the spoken event of interest is likely to have occurred based on a comparison of the data representing the unknown speech with the specification of the spoken event of interest," as required in amended claim 1.

The Applicant respectfully submits that one of ordinary skill in the art would not have been motivated to combine the teachings of Chou which are directed to speech utterance understanding with the teachings of Foote which are directed to audio information retrieval. Further, even if the Chou system is modified to include the audio information retrieval techniques of Foote, the resultant system still does not perform the recited functions of "forming a specification of a spoken event of interest to be located in unknown speech according to a plurality of sequences of subword units representing the spoken event of interest, wherein the forming includes identifying one or more instances of the spoken event of interest in a first set of audio signals, and representing each identified instance of the spoken event of interest in the specification using at least one of the plurality of sequences of subword units, ... and locating putative instances of the spoken event of interest in the second audio signal using the specification of the spoken event of interest, wherein the locating includes identifying time locations of the second audio signal at which the spoken event of interest is likely to have occurred based on a comparison of the data representing the unknown speech with the specification of the spoken event of interest," as required in amended claim 1.

For at least these reasons, claim 1 is allowable over Chou in view of Foote.

Independent claims 17 and 18 include similar limitations and are also allowable over Chou and Foote for at least the same reasons.

Each of the dependent claims is allowable over Chou and Foote for at least the same reasons given above with respect to the independent claims from which they depend.

Conclusion

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any

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Serial No. : 10/565,570
Filed : July 21, 2006
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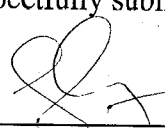
Attorney Docket No.: 30004-004US1

claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

The Petition for Extension of Time fee in the amount of \$245 is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other charges or credits to Deposit Account No. 50-4189, referencing Attorney Docket No. 30004-004US1.

Respectfully submitted,

Date: 3/4/09



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